Recommendation 3.2.2.

DHS guidance should be prepared that would clarify the requirement for testing in Title 22, Section 60316(a) and stress that alternatives to a pressure test are sufficient in many cases.

Recommendation 3.2.3.

DHS should amend Title 22, Article 5 to incorporate inspection and testing requirements consistent with whatever requirements are adopted as part of a California version of Appendix J of the California Plumbing Code, as recommended in Recommendation 3.1.1.

Approach and Implementation:

DHS should carry out recommendations 3.2.1 through 3.2.3. Time frame: July 2004-September 2005.

4. Regulations and Permitting

The most important State standards and regulatory programs that affect water recycling fall into two categories: public health and water quality. The DHS is responsible for adopting uniform statewide recycled water criteria related to public health and for advising the RWQCBs in their drafting of permits for each recycled water system. DHS has 21 districts in the State, which do not always uniformly interpret the State standards. County health departments also have jurisdiction over some aspects of recycled water use. In some areas, local health departments have elected to operate programs to control crossconnections. There are instances where local requirements have exceeded the requirements in State regulations, imposing an additional burden on water recycling systems and, perhaps, exceeding local authority.

Water quality regulations and the issuance and enforcement of permits for the use of recycled water are administered by nine RWQCBs under the overall jurisdiction of the SWRCB. Each RWQCB is controlled by independently appointed boards. Due to different hydrologic conditions, water quality issues and regional perspectives, the interpretation of laws and regulations governing recycled water has not always been uniform throughout the State.

Issues that have been identified are regulation of health and safety, regulation of incidental runoff, uniform interpretation of State standards, water softeners, permitting procedures, and source control.

4.1. HEALTH AND SAFETY REGULATION

Issue

Recycled water must be fully protective of public health and safety. The existing public health standards and regulatory structure for the use of recycled water are found in Titles 17 and 22, which were last updated in the year 2000. Because of the growing use of recycled water and the continued need to protect public health and safety, it is appropriate to regularly review those stan-



Sprinkler irrigation can result in minor amounts of incidental runoff from the site, which may be a concern to regulatory agencies.

dards and the regulatory structure. At the same time it is critical that there is on-going research into the emerging public health issues associated with recycled water to determine if there are any gaps in the current regulations of recycled water. Additionally, there is a need for a strong regulatory structure that promotes consistency and uniformity of regulatory oversight in California.

Recommendation 4.1.1.

The Department of Health Services should involve all stakeholders in the review of the following:

- a. potential new factors that could affect the health and safety associated with the use of recycled water,
- b. need for regular periodic updating of the regulations and statutes to continue providing for public health and safety in the use of recycled water,
- c. effectiveness of existing regulatory structure including roles of State and local regulators,
- d. whether there is a need for local enforcement agencies to have the authority to apply more protective requirements than what is included in Titles 17 and 22, and, if so, what should be the extent of that authority, and
- e. additional research (see Recommendation 6.1.1. Research Funding).

Approach and Implementation:

DHS should involve all stakeholders including, but not limited to, researchers, environmental health directors and officers, epidemiologists and toxicologists, users of recycled water, recycled water producers and purveyors and others. Time frame: July 2003 to June 2004.

4.2. INCIDENTAL RUNOFF

Issue

Recycled water applied for irrigation is intended to remain on the irrigated areas to avoid public health and nuisance problems from runoff. Permits, issued by the RWQCBs, authorizing the use of recycled water for irrigation typically include provisions prohibiting runoff. Incidental runoff or overspray of minor amounts of irrigated water at the edges of irrigated areas is difficult to prevent. It is also difficult to prevent runoff of rainwater from areas irrigated with recycled water or from aesthetic ponds on golf courses filled with or previously filled with recycled water, especially during major storm events. Some RWQCBs strictly enforce the runoff prohibitions, resulting in the need for expensive design provisions or preventing the feasibility of using recycled water. The runoff prohibitions have been dubbed the "one molecule rule," implying that the existence of one molecule of wastewater origin in runoff constitutes a discharge of wastewater.

Recommendation 4.2.1.

The SWRCB should convene a committee to review the legal requirements of federal and State statutes and regulations that relate to the regulation of incidental runoff and to deter-

mine the regulatory and enforcement options that are available to Regional Water Quality Control Boards. This review should include the following items.

- a. An evaluation of best available scientific data that demonstrate the effects of discharges of incidental runoff. Many recycled water producers and/or distributors have performed varied testing and monitoring of incidental runoff that could be available to the committee. This scientific evidence may be in the form of reporting requirements to regional boards, testing requirements for spills, State Implementation Plan (13267 letter), or other reports prepared for various reasons. The committee should recommend best management practices that under normal environmental conditions would allow discharge of incidental runoff without harm to the environment.
- b. How other states address comparable situations in regulation and enforcement.
- c. Within current legal constraints, with respect to discharges from storage or decorative ponds at use sites, options to be evaluated should include, but not be limited to:
 - (i) Development of statewide general permit requirements for ponds filled with recycled water. Within the general permit, unintentional discharges of commingled recycled and stormwater would not be treated as violations, but rather water that is a mixture of rainwater and recycled water that runs off a site as a direct result of rainfall. Specific requirements of the permit would include best management practices and a method of uniform enforcement across the State.
 - (ii) Regional Water Quality Control Board adoption of a specific waiver of waste discharge requirements for unintentional recycled water overflows pursuant to Water Code section 13269.
 - (iii) Allowance of discharges under an NPDES permit with the following conditions:
 - (a) compliance point to be at the point of leaving the wastewater treatment plant (WWTP) rather than exit of the pond,
 - (b) WWTP NPDES permit may incorporate any requirements applicable to use site ponds rather than a separate permit being required for each use site where a pond exists,
 - (c) monitoring and testing shall be established relative to the pond/site, and
 - (d) California Toxics Rule would apply to WWTP discharge only.
- d. With respect to other forms of incidental runoff, options similar to those above should be evaluated.

Approach and Implementation:

It is uncertain how much flexibility exists within the current framework of State and federal statutes and regulations in regulating incidental runoff of recycled water. It has been suggested that other states interpret federal requirements differently than the SWRCB and RWQCBs in California. It also appears that within California RWQCBs are not consistent in their regulation of incidental runoff. The Task Force participants discussed a recommendation to amend either State or federal statutes. However, it would not be appropriate to recommend statutory changes without understanding what options exist under current stat-





City of Chino Hills, CA, baseball fields irrigated with recycled water.

utes and, if these options are inappropriate, which State or federal law should be amended. The SWRCB should create a committee to conduct a legal analysis of the problem and the permissible options within the current legal framework. There is the possibility that a legislative remedy may be necessary, but this cannot be recommended without the legal analysis first. It would be helpful to decision-makers if there were more documentation regarding the water quality impacts of incidental runoff. If there are situations where a minor escape of recycled water from a use site would not have a negative impact, then there would be a basis for seeking more regulatory flexibility. Time frame: July 2003-January 2004.

4.3. UNIFORM INTERPRETATION OF STATE STANDARDS

Issue

Inconsistent regulation of water recycling by State and local officials leads to confusion and uncertainty in how to design and manage water reuse systems and appears to have led to overly restrictive regulation and added costs, creating an obstacle to achieving the full potential for water reuse.

Recommendation 4.3.1.

The SWRCB should appoint and empower a key person to provide oversight of the water recycling permits issued by the various RWQCBs. This person would act as an ombudsman to facilitate recycling and arbitrate conflicts.

Approach and Implementation:

While the SWRCB attempts to achieve uniform interpretation and application of laws and regulations through issuance of guidance documents, it has not focused on water recycling in recent years. The SWRCB serves as an appeal board for reviewing disputes over RWQCB rulings, and SWRCB decisions in these disputes often create precedents that are applied statewide. However, there is no current on-going effort to oversee the regulation of water recycling. As water recycling increases in the State and the complexity of situations increases, there is a need for a water recycling specialist within the SWRCB oversight functions who is familiar with all applicable statutes and regulations, the variety of local conditions occurring with water reuse, and the potential administrative approaches to respond to those conditions. Time frame: August 2003-ongoing.

Recommendation 4.3.2.

The DHS needs to take steps to ensure the uniform interpretation and application of water recycling criteria in Title 22 and cross-connection control provisions in Title 17 of the California Code of Regulations.

Approach and Implementation:

The DHS has a Recycled Water Unit that has the function of developing guidance for all of the DHS district staff on various issues, of assembling guidance to be readily accessible, and coordinating meetings to discuss issues as they arise and to provide a forum for staff from various districts to collectively agree on approaches. Nevertheless, there appears to be inconsistent interpretation of statewide standards and a lack of public knowledge that the Recycled Water Unit exists to help resolve these inconsistencies. There appears to be a need for improved training of district staff on recycled water standards and communication with district staff to achieve more uniformity. DHS should develop and implement a plan to increase the public awareness of the Recycled Water Unit, increase its role in coordinating the interpretation and application of State laws and regulations, and improve centralized training of district staff in the regulation of water recycling projects. Time frame: Plan development: July-October 2003; Implementation: November 2003-ongoing.

Recommendation 4.3.3.

A legal opinion needs to be rendered whether authority exists for local health agencies to adopt water recycling requirements that are more restrictive than those included in Titles 17 and Title 22.

Approach and Implementation:

Statewide rules for cross-connection control and recycled water quality are specified in Titles 17 and 22 of the California Code of Regulations. Some DHS district offices, county health departments, or RWQCBs have imposed requirements that may be more restrictive than the requirements in Titles 17 or 22 or imposed on recycled water use sites requirements not specifically addressed in statutes. Health officials cite their authority to do this as Section 116800 of the Health and Safety Code. This authority has been disputed but the issue remains unresolved. The Opinion Unit of the California Department of Justice (Attorney General's Office) should be requested to conduct a legal analysis to determine the latitude that is permitted to impose more restrictive requirements. Time frame: July-October 2003.

Recommendation 4.3.4.

Water recycling programs in Florida should be investigated to determine whether there are concepts that should be adopted in California.

Approach and Implementation:

The State of Florida has been cited as a model of a state that has a regulatory structure that safeguards the public while allowing extensive water recycling to take place without unreasonable impediments. One or more Florida officials should be invited to a workshop to exchange information on regulatory approaches in Florida in contrast to California to identify any useful ideas for changes in California. This workshop should be hosted by SWRCB, DHS, and other knowledgeable parties. Time frame: January-February 2004.

Recommendation 4.3.5.

The RWQCBs should be more proactive during the planning of recycled water projects so issues can be addressed before design commences.